Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-32 (cancelled)

33.   (Previously presented) A method of concealing spatial errors during decoding of an image comprised of a stream of macroblocks coded using weighted prediction, comprising the steps of:

examining at least one macroblock for pixel data errors during weighted prediction decoding, and if any such errors exist, then:

weighting the at least one macroblock in accordance with the weighted prediction decoding with at least one reference picture to yield a weighted prediction for concealing a macroblock found to have pixel errors.

34.   (Previously presented) The method according to claim 33 further comprising the steps of:

selecting an implicit weighted prediction decoding mode; and

weighting at least one macroblock using implicit mode weighted prediction.

35.   (Previously presented) The method according to claim 33 further comprising the steps of:

selecting an explicit weighted prediction decoding mode; and

weighting at least one macroblock using explicit mode weighted prediction.

36.   (Previously presented) The method according to claim 34 further comprising the step of using the implicit mode for temporal concealment with use of bi-predictive compensation.

37.   (Previously presented) The method according to claim 33 further comprising the step of weighting at least one macroblock using bi-predictive compensation in accordance with a type a type of reference picture.

38.. (Previously presented) The method according to claim 37 further comprising the step of weighting at least one macroblock to limit error propagation when at least a portion of at least one reference picture was previously concealed.

39. (Previously presented) The method according to claim 37 further comprising the step of weighting at least one macroblock to limit error propagation when at least a portion of the at least one reference picture was iteratively concealed.

40. (Previously presented) The method according to claim 37 further comprising the step of weighting each of at least two different macroblocks from different reference pictures to yield a weighted prediction for concealing a macroblock found to have pixel errors.

41. (Previously presented) The method according to claim 37 further comprising the weighting the at least one macroblock of a current picture and a neighboring picture.

42. (Previously presented) The method according to claim 33 further comprising the step of weighting the at least one macroblock when one of a fading or dissolve is detected.

43. (Previously presented) The method according to claim 33 further comprising the step of weighting the at least one macroblock using one of an implicit and explicit mode in accordance with prescribed criterion.

44. (Previously presented) The method according to claim 43 further comprising the step of weighting the at least one macroblock using one of an implicit and explicit mode in accordance with criterion associated with one of a spatial and temporal neighboring macroblock, respectively.

45. (Previously presented) The method according to claim 44 further comprising the step of weighting the at least one macroblock using one of an implicit and explicit mode

in accordance with criterion associated with one of a spatial and temporal neighboring macroblock, respectively, that are correctly received.

46.   (Previously presented) The method according to claim 43 further comprising the step of weighting at the least one macroblock using one of an implicit and explicit mode in accordance with criterion associated the reference picture type.

47.   (Previously presented) The method according to claim 35 further comprising the step of estimating a weighting value for weighting the at least one macroblock from a temporal neighboring macroblock.

48.   (Previously presented) The method according to claim 47 further comprising the step of estimating the weighting value from the temporal neighboring macroblock by curve fitting to find an average intensity value from which such estimated weighting value is derived.

49.   (Previously presented) The method according to claim 47 further comprising the step of estimating the weighting value from a temporal neighboring macroblock based on a linear fading/dissolve in the reference picture.

50.   (Previously presented) The method according to claim 39 further comprising the step of estimating a weighting value for weighting the at least one macroblock from at least one spatial neighboring macroblock.

51.   (Previously presented) The method according to claim 41 further comprising the step of estimating weighting value for weighting the at least one different macroblock from at least one of a spatial and temporal neighboring macroblock in accordance with prescribed criterion.

52.   (Previously presented) The method according to claim 41 wherein the prescribed criterion includes assigning the at least one spatial neighboring macroblock a higher priority.

53.   (Previously presented) The method according to claim 37 further comprising the step of selecting the reference picture from a collection of recently stored pictures.

54.   (Previously presented) A method of concealing, spatial errors in an image comprised of a stream of macroblocks coded using weighted prediction, comprising the steps of:

examining each macroblock for pixel data errors, and if such errors exist during weighted mode decoding, then:

weighting, each of at least two different macroblocks from at least two different reference pictures by an amount determined by the weighted prediction decoding to yield a weighted prediction for concealing a macroblock found to have pixel errors.

55.   (Previously presented) A decoder for concealing spatial errors during decoding of an image comprised of a stream of macroblocks coded using weighted prediction, comprising

a detector for examining each macroblock for pixel data errors; and

an error concealment parameter generator for generating values for weighting at least one macroblock from a reference picture using one of a first and second weighting modes in accordance with the decoding of the macroblocks for concealing a macroblock found to have pixel errors.

56.   (Previously presented) The decoder according to claim 55 wherein the detector comprises a variable length decoder block.

57.   (Previously presented) The decoder according to claim 55 wherein the error concealment parameter generator generates values for weighting the at least one macroblock to limit error propagation when at least a portion of the reference picture was previously concealed.

58.   (Previously presented) The decoder according to claim 55 wherein the error concealment parameter generator generates values for weighting the at least one macroblock when one of a fading or dissolve is detected.

59.   (Previously presented) The decoder according to claim 55 wherein the error concealment parameter generator generates values for weighting the at least one macroblock using one of the implicit and explicit mode in accordance with prescribed criterion.

60.   (Previously presented) The decoder according to claim 59 wherein the error concealment parameter generator generates values for weighting the at least one macroblock in accordance with criterion associated with one of a spatial and temporal neighboring macroblock.